## THE PINE-BARREN BELLWORT

By KENNETH K. MACKENZIE

One of the least known of the many peculiar plants found in the pine-barrens of New Jersey is the pretty little bellwort described by Dr. Britton in 1889 (Trans. N. Y. Acad. Sci. 9: 13) as Oakesia sessilifolia var. (?) nitida. Since its original collection at Tom's River and Cedar Bridge, it has also been found at Forked River, Lakewood, and Egg Harbor, all within thirty miles of the type station. In addition to its limited range, one reason for the lack of specimens of this species in collections probably is that at the time of its flowering in May the pine-barrens are poor collecting grounds and little explored.

Since its first description this plant has been referred by the late Rev. Thomas Morong (Mem. Torrey Club 5: 111), together with other forms of Oakesia, to Uvularia as Uvularia sessilifolia nitida, and under this name it appears in the Illustrated Flora (1: 409). It is in this last-named work, too, where we first find a hint as to the true relationship of this bellwort, when we are told that it is "perhaps referable to the following species" (Uvularia puberula Michx.); and it is to emphasize the close relationship existing between this mountain bellwort (U. puberula) and our pine-barren plant that the present paper is written.

	U, sessilifolia	U. nitida	U. puberula
Capsule	Noticeably stipitate	Sessile, 17 mm. long	Sessile, 24 mm. long
Style	Slender, much exceed- ing the anthers	Slender, much exceed- ing the anthers	Thick, little exceed- ing the anthers
Leaves	Sessile, glaucous be- neath, thin, not strongly reticulate- veined; margins en- tire or minutely ser- rulate	Subcordate, very green on both sides, thin- nish, not strongly re- ticulate-veined; margins minutely serrulate	Subcordate, very green on both sides, thick, strongly reticu- late-veined; mar- gins serrulate
Stem angles	Essentially smooth	Essentially smooth	Serrulate and puberu- lent

During the last collecting season I had the good fortune to collect the pine-barren bellwort at Tom's River, not only in flower, but also later on in good fruiting condition. A study of this material and all other available collections has convinced me

that in the pine-barren bellwort we have a distinct species, which should be called **Uvularia nitida**, and which is much more closely related to *U. puberula* than it is to *U. sessilifolia*. The preceding table will show the chief differences between the three species.

From the above it may be noted that the differences between U. nitida and U. sessilifolia are very pronounced, while those between U. nitida and U. puberula are much more slight. This lastnamed species is variable, and incomplete specimens from the South, in the Columbia University herbarium, show a close approach to U. nitida. The species, however, as a rule, seem decidedly distinct, when represented by good specimens. The style character is apparently especially constant, although it may depend to some extent on the age of the flowers. As between U. sessilifolia and U. puberula this distinction is well shown in the Illustrated Flora (figs. 988, 989).

NEW YORK CITY.

## A KEY TO THE WHITE AND BRIGHT-COLORED SESSILE POLYPOREAE OF TEMPERATE NORTH AMERICA—I

BY WILLIAM A. MURRILL

KEY TO THE GENERA

Context white.

Tubes hexagonal, arranged in radiating rows, context thin.

A. HEXAGONA

Tubes mostly shallow, marginal and obsolete, hymenium hydnoid or irpiciform at a very early stage.

B. IRPICIPORUS

Tubes normally poroid, sometimes irpiciform from the rupture of the dissepiments at maturity.

Hymenium at length separating very smoothly from the context.

C. Piptoporus

Hymenium not separating as above.

Pileus very soft, spongy and elastic throughout.

D. SPONGIPORUS

Pileus more or less firm, flexible or rigid.

Context duplex, spongy above, firm below, surface sodden and bibulous.

E. Spongipellis

Context not duplex as above.

Pileus fleshy-tough to woody and rigid. Surface anoderm, rarely zonate.

Hymenium more or less smoke-colored at maturity.

F. BIERKANDERA